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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,221	05/15/2001	Rolf De Vos	OYJALO-008	5384

530 7590 06/12/2002

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EXAMINER

ALVO, MARC S

ART UNIT	PAPER NUMBER
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1731

9

DATE MAILED: 06/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

1C-9

Office Action Summary

Application N .

09/763,221

Applicant(s)

VOS ET AL

Examiner

Steve Alvo

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____ .
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ .
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____ .
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____ .

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over BENTVELZEN et al in view of ADMITTED PRIOR ART (specification, page 4, lines 15-24) or AT 403 704 or SIXTA et al.

BENTVELZEN et al teaches treating a stream of medium consistency pulp with gaseous bleaching agents, including ozone (column 32, lines 21-26), by passing the gaseous bleaching agent, e.g. ozone through radial extending stators. BENTVELZEN et al gives an example wherein 224 rotors rotate at a speed of 435 rpm at swept area of 72,200, see BENTVELZEN et al, column 35, lines 3-15. BENTVELZEN et al teaches that the swept area could be as low as 10,000, which could be obtained by using a rotating speed of 10,000 divided by 72,200 X 435 or 60 rpm. ¹⁶⁴¹⁵ This is not a high shear mixer. It would have been obvious to use high concentrations of ozone when bleaching as taught by the ADMITTED PRIOR ART or AT 403 704 or SIXTA et al.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over BENTVELZEN et al in view of ADMITTED PRIOR ART (specification, page 4, lines 15-24) or AT 403 704 or SIXTA et al as applied to claim 7 above, and further in view of CHENG.

CHENG teaches using a porous metal injector to disperse a gas into a liquid. It would have been obvious to use the distribution injector or nozzle of CHENG to distribute the ozone

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gas of BENTVELZEN et al into the pulp slurry. It would have been obvious to use any known injection gaseous injection means to inject the ozone gas of BENTVELZEN et al.

The argument that page 4, lines 15-24 (original specification) are part of the Summary of the invention and is not Prior Art is not convincing as these lines state that Swedish Patent Application 9502339-6 and EP-A-426 652 are prior art. It is noted that the substitute specification filed with the preliminary amendment has not been entered, as Applicant has not indicated that it did not contain new matter.

The argument that AT 403 704 nor SIXTA teach high ozone concentrations is not convincing as SIXTA et al teaches using up to 300 g/m^3 and AT 403 704 teaches using 120 g/m^3 . Besides the ADMITTED PRIOR ART is also being relied on to teach such high concentrations, e.g. the teachings in the specification with respect to Swedish Patent Application 9502339-6 or EP-A-426 652.

The arguments that BENTVELZEN uses a storage tank and divided gas entry are not convincing as the claims do not exclude neither the divided gas entry nor the storage tank of BENTVELZEN et al. Applicant states that the combination of references do not teach each and every element of the claims, but has not pointed out a single feature not taught.

Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no original disclosure, which indicates that the ozone is formed from pressurized pressure. Applicant should indicate where this is disclosed in the original specification.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

When filing an "Official" FAX in Group 1730, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file. The "**Official**" FAX phone numbers for this TC 1700 are:

Non-Final Fax: 703-872-9310 After-Final FAX: 703-872-9311

When filing an "Unofficial" FAX in Group 1730, please indicate in the Header (upper right) "Unofficial" for Draft Documents and other Communications with the PTO that are not for entry into the file of the application. This will expedite processing of your papers. The "Unofficial" FAX phone number for this Art Unit (1731) is 703-305-7115.

Any inquiry concerning this communication or earlier communications from the **primary examiner** should be directed to **Steve Alvo** whose telephone number is **703-308-2048**. The Examiner can normally be reached on Monday - Friday from **6:00 AM - 2:30 PM (EST)**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Stanley Silverman, can be reached on 703-308-3837.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Group receptionist** whose telephone number is **703-308-0661**.

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MSA
6/8/02



STEVE ALVO
PRIMARY EXAMINER
ART UNIT 1731